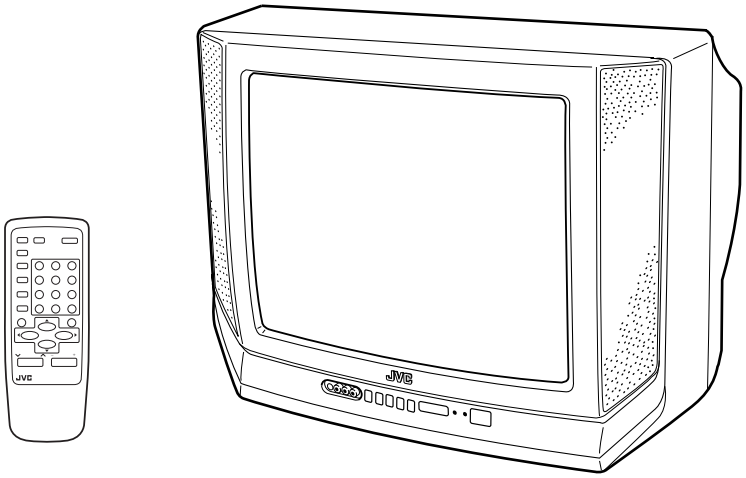
JVC

SCHEMATIC DIAGRAMS

COLOR TELEVISION

AV-14F3PX(PH)



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No. 56083
Sep. 2000

STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1. SAFETY

The components identified by the ⚠ symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2. SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1) Input signal : Color bar signal
(2) Setting positions of each knob/button and variable resistor
: Original setting position when shipped
(3) Internal resistance of tester : DC 20kΩ/V
(4) Oscilloscope sweeping time : H → 20μS/div
: V → 5mS/div
: Others → Sweeping time is specified.
(5) Voltage values : All DC voltage values

* Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3. INDICATION OF PARTS SYMBOL [EXAMPLE]

● In the PW board : R1209 → R209

4. INDICATIONS ON THE CIRCUIT DIAGRAM

(1) Resistors

● Resistance value

No unit	: [Ω]
K	: [KΩ]
M	: [MΩ]

● Rated allowable power

No indication	: 1/4 [W]
Others	: As specified

● Type

No indication	: Carbon resistor
OMR	: Oxide metal film resistor
MFR	: Metal film resistor
MPR	: Metal plate resistor
UNFR	: Non-flammable resistor
FR	: Fusible resistor

* Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2) Capacitors

● Capacitance value

1 or higher	: [pF]
less than 1	: [μF]

● Withstand voltage

No indication	: DC50 [V]
AC indicated	: AC withstand voltage [V]
Others	: DC withstand voltage [V]

* Electrolytic Capacitors
47/50 [Example]: Capacitance value [μF]/withstand voltage [V]

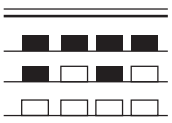
● Type

No indication	: Ceramic capacitor
MY	: Mylar capacitor
MM	: Metalized mylar capacitor
PP	: Polypropylene capacitor
MPP	: Metalized polypropylene capacitor
MF	: Metalized film capacitor
TF	: Thin film capacitor
BP	: Bipolar electrolytic capacitor
TAN	: Tantalum capacitor

(3) Coils

No unit	: [μH]
Others	: As specified

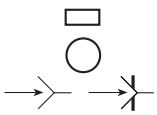
(4) Power Supply



* Respective voltage values are indicated.

(5) Test point

(6) Connecting method



(7) Ground symbol

⊥ : LIVE side ground
⏚ : ISOLATED (NEUTRAL) side ground
⏚ : EARTH ground
⏚ : DIGITAL ground

5. NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND and the ISOLATED (NEUTRAL) : (⏚) side GND. Therefore, care must be taken for the following points.

(1) Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED (NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.
(2) Do not short between the LIVE side GND and ISOLATED (NEUTRAL) side GND or never measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED (NEUTRAL) side GND at the same time. If the above precaution is not respected , a fuse or any parts will be broken.

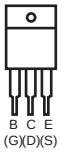
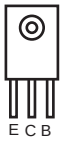
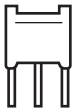
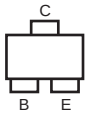
● **Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.**

CONTENTS

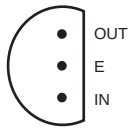
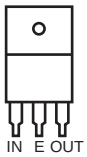
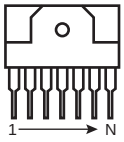
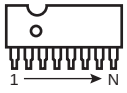
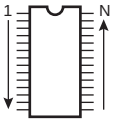
SEMICONDUCTOR SHAPES 2-4
BLOCK DIAGRAM 2-5
CIRCUIT DIAGRAMS
MAIN PWB CIRCUIT DIAGRAM (Including CRT SOCKET PWB) 2-7
PATTERN DIAGRAMS
MAIN PWB PATTERN 2-11
CRT SOCKET PWB PATTERN 2-13

SEMICONDUCTOR SHAPES

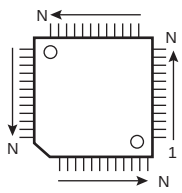
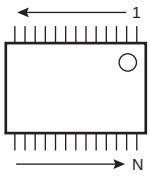
TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					CHIP TR 

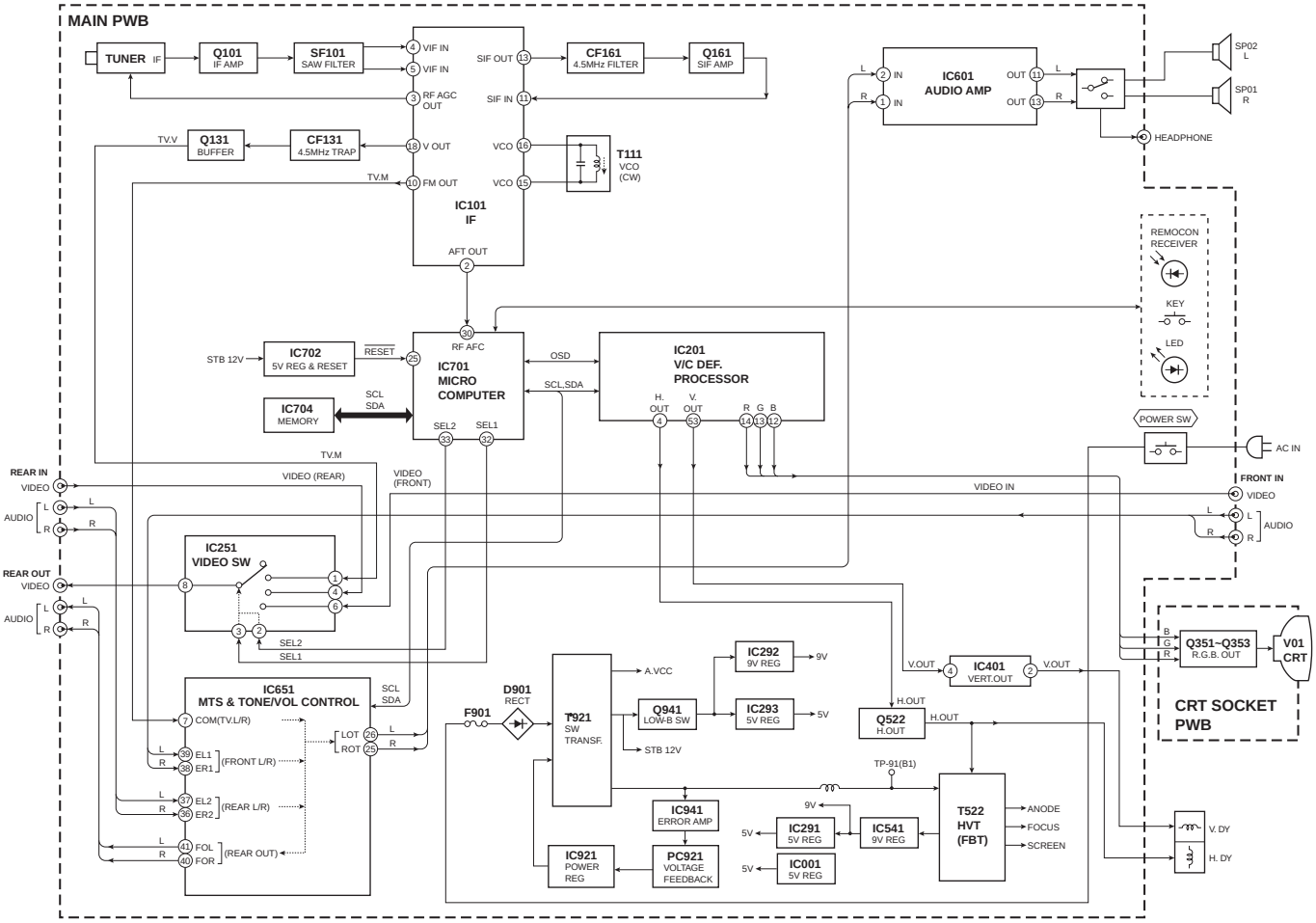
IC

BOTTOM VIEW	FRONT VIEW			TOP VIEW
				

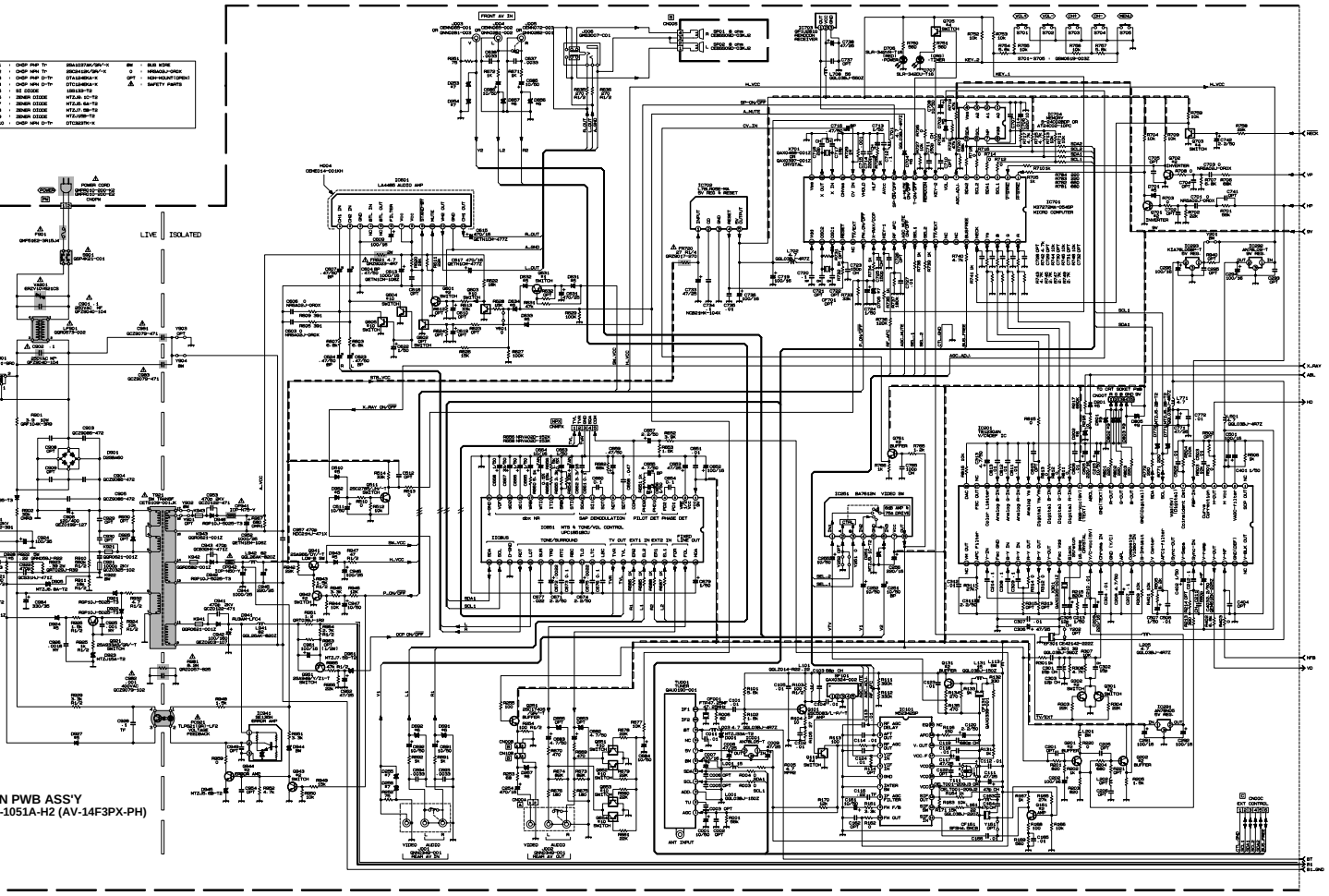
CHIP IC

TOP VIEW		
		

OCK DIAGRAM

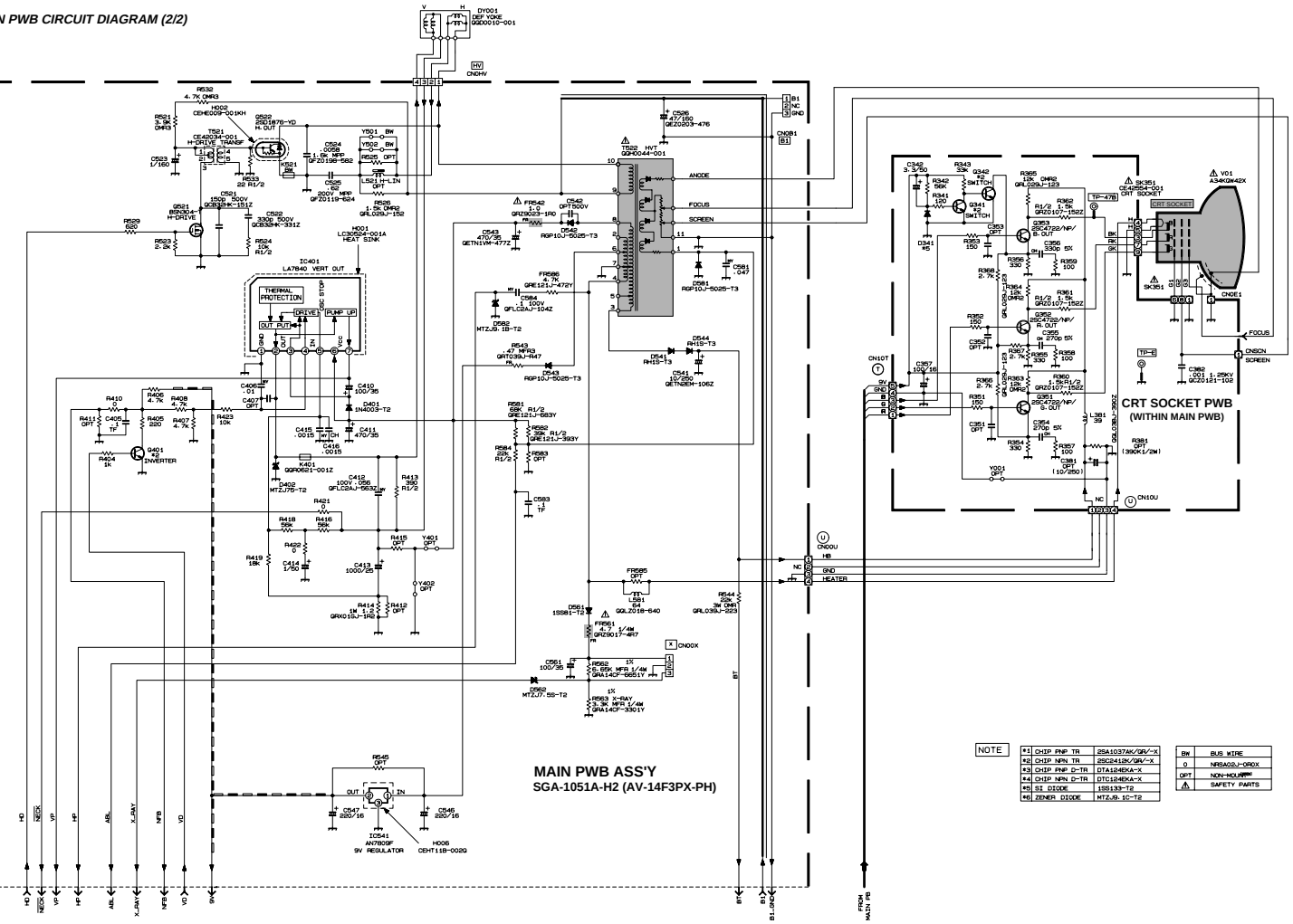

MAIN PWB
TUNER IF
Q101 IF AMP
SF101 SAW FILTER
VIF IN
VIF IN
RF AGC OUT
SIF OUT
CF161 4.5MHz FILTER
Q161 SIF AMP
SIF IN
TV.V
Q131 BUFFER
CF131 4.5MHz TRAP
V OUT
VCO
T111 VCO (CW)
TV.M
FM OUT
VCO
IC101 IF
AFT OUT
IC601 AUDIO AMP
IN
IN
OUT
OUT
SP02 L
SP01 R
HEADPHONE
REMOCON RECEIVER
KEY
LED
STB 12V
IC702 5V REG & RESET
RESET
RF AFC
IC701 MICRO COMPUTER
OSD
SCL,SDA
IC201 V/C DEF. PROCESSOR
H. OUT
V. OUT
R G B
IC704 MEMORY
SCL
SDA
SEL2
SEL1
POWER SW
AC IN
REAR IN
VIDEO
AUDIO
TV.M
VIDEO (REAR)
VIDEO (FRONT)
VIDEO IN
FRONT IN
VIDEO
AUDIO
IC251 VIDEO SW
REAR OUT
VIDEO
AUDIO
SEL2
SEL1
IC651 MTS & TONE/VOL CONTROL
SCL
SDA
COM(TV.L/R)
EL1
ER1
(FRONT L/R)
EL2
ER2
(REAR L/R)
FOL
FOR
(REAR OUT)
LOT
ROT
D901 RECT
F901
T921 SW TRANSF.
A.VCC
IC292 9V REG
9V
Q941 LOW-B SW
IC293 5V REG
5V
STB 12V
V.OUT
IC401 VERT.OUT
V.OUT
H.OUT
Q522 H.OUT
H.OUT
TP-91(B1)
IC941 ERROR AMP
IC921 POWER REG
PC921 VOLTAGE FEEDBACK
9V
IC291 5V REG
IC541 9V REG
5V
IC001 5V REG
5V
T522 HVT (FBT)
ANODE
FOCUS
SCREEN
V. DY
H. DY
B
G
R
Q351~Q353 R.G.B. OUT
V01 CRT
CRT SOCKET PWB

DIAGRAMS *MAIN PWB CIRCUIT DIAGRAM (1/2)*



N PWB ASS'Y
-1051A-H2 (AV-14F3PX-PH)

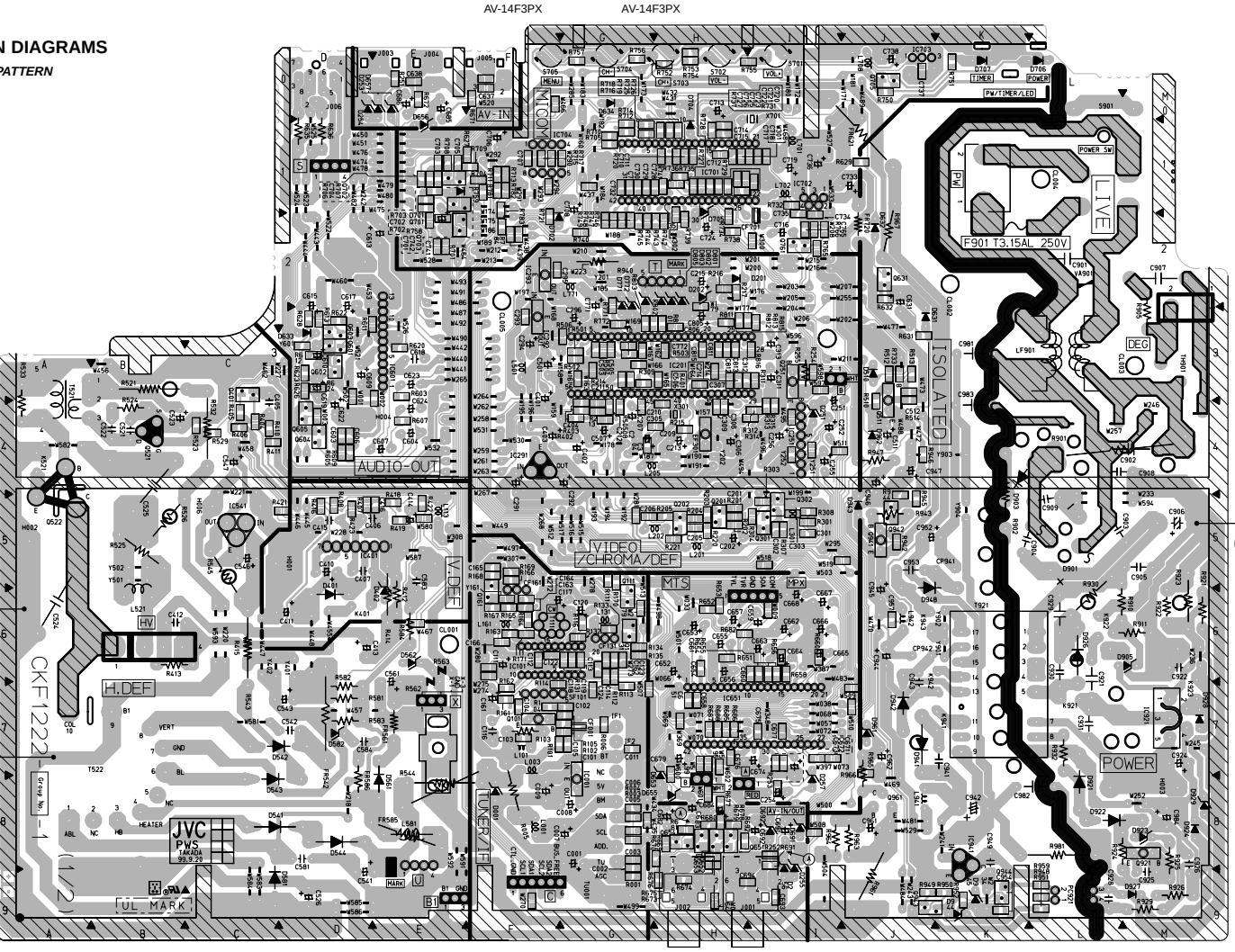
N PWB CIRCUIT DIAGRAM (2/2)



N DIAGRAMS

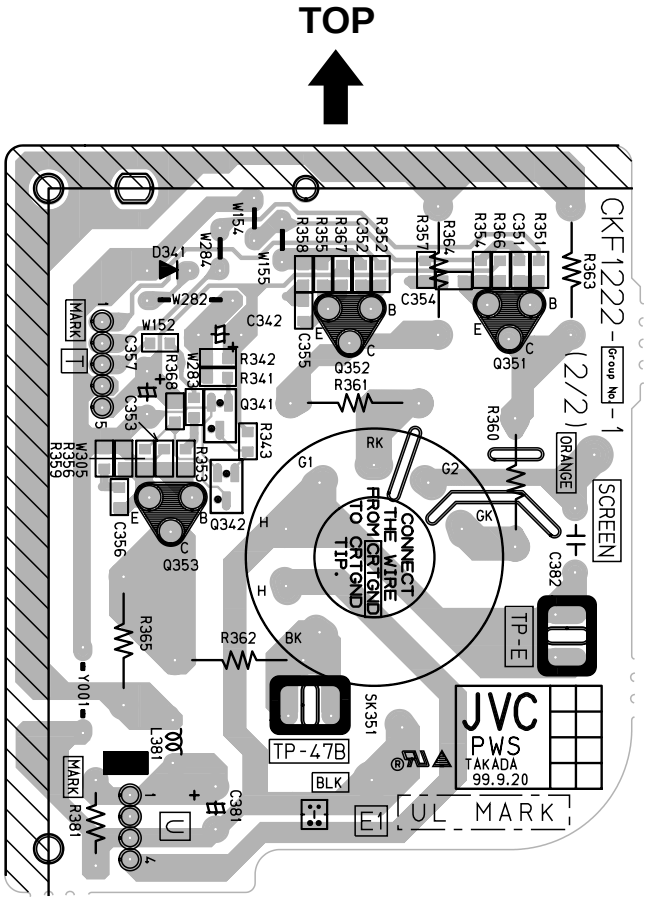
PATTERN

AV-14F3PX AV-14F3PX



No. 56083 2-11 2-12 No. 56083

CRT SOCKET PWB PATTERN



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VICTOR COMPANY OF JAPAN, LIMITED
TELEVISION RECEIVER DIVISION 1106 Heta, Iwai-city, Ibaraki-prefecture, 306-0698, Japan

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